

Claims

- [c1] Commercially viable process using solvent solvent extraction and crystallization to obtain Licorice extract containing 4% to 90% glabridin, from the roots of Glycyrrhiza glabra L.

- [c2] Commercially viable process using supercritical fluid extraction to obtain Licorice extract containing 4% to 90% glabridin, from the roots of Glycyrrhiza glabra L.

- [c3] The process of claim 1, wherein the method is non-chromatographic

- [c4] The process of claim 1, wherein the method does not involve fermentation techniques.

- [c5] The process of claim 2 wherein the supercritical fluid used is carbon dioxide

- [c6] Compositions containing Glabridin of claim 1 or claim 2, and one or more tyrosinase inhibitors selected from: Tetrahydrocurcumin
Tetrahydrodemethoxycurcumin Tetrahydrobisdemethoxycurcumin, Curcumin, Demethoxycurcumin Bisdemethoxycurcumin, Ellagic acid, Soy isoflavones, with or without added antioxidants, agents that support skin texture and/or sunscreen agents, in a cosmetically acceptable carrier.

- [c7] The composition in claim 6, wherein the Glabridin is present in an amount of 0.1% to 3% w/w, preferably in concentration of 0.1% to 0.5% w/w of the composition.

- [c8] The composition in claim 6, wherein the tyrosinase inhibitor is a mixture of Glabridin and tetrahydrocurcumin, tetrahydrodemethoxycurcumin, tetrahydrobisdemethoxy curcumin and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition.

- [c9] The composition of claim 6 wherein the tyrosinase inhibitor is a mixture of glabridin and tetrahydrocurcumin and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5%

w/w of the composition.

- [c10] The composition of claim 6, wherein the tyrosinase inhibitor is a mixture of Glabridin and tetrahydrodemethoxycurcumin and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition.
- [c11] The composition of claim 6, wherein the tyrosinase inhibitors is a mixture of Glabridin and tetrahydrobisdemethoxycurcumin and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition.
- [c12] The composition of claim 6, wherein the tyrosinase inhibitor is a mixture of Glabridin, tetrahydrocurcumin and Soy Isoflavones and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition..
- [c13] The composition of claim 6, wherein the tyrosinase inhibitor is a mixture of Glabridin and Ellagic acid and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition.
- [c14] The composition of claim 6, wherein the tyrosinase inhibitor is a mixture of Glabridin and ethyl-p-methoxycinnamate from Galanga extract and wherein the mixture is present in an amount of 0.1% w/w to about 5% w/w preferable in an amount of 0.1 to 0.5% w/w of the composition.
- [c15] The composition of claim 6, wherein the said antioxidants include one or more of the following natural extracts and/or natural/nature-identical isolated compounds: rosemary extract, rosmarinic acid, carnosic acid, rosmanol, grape seed extract, escin, esculetin, green tea catechins, Terminalia chebula extract, amla (*Embllica officinalis*) extract, emblicanins, carotenoids, epicatechin, epicatechin gallate, epigallocatechin gallate, tannic acid, Withania somnifera extract, ascorbyl monopalmitate, tomato extract, decarboxycarnosine hydrochloride, gamma oryzanol, tocopherol and tocotrienols.

- [c16] The composition of claim 6, wherein the said sunscreen is selected from the group consisting of Titanium dioxide, zinc oxide, octyl methoxycinnamate, octyl salicylate,, Avobenzone, dioxybenzone, sulisobenzene, oxybenzone with one or more of the following natural sunscreen boosters: ethyl-p-methoxycinnamate, Kaempferia galanga extract, isoamyl-p-methoxycinnamate, pongamol, anacardic acid, ginkgolic acid esters.
- [c17] The composition of claim 6, wherein the composition is in the form of a cream, lotion, gel and/or oil.
- [c18] A method of facilitating skin fairness or improving the appearance of the skin, by decreasing melanin synthesis through application of the compositions of claim 6 to areas of the skin with hyperpigmentation, melasma, age spots, freckles.
- [c19] A method of providing better appearance to the skin under the eyes, neck, armpits and/or removing blemishes / black heads through application of the compositions of claim 6.
- [c20] A method of protecting the skin against the adverse effects of environmental factors such as UV rays, smoke or fog, the method comprising applying to the skin the composition of claim 15.
- [c21] A method of protecting the skin against sun damage and facilitating skin fairness and improved appearance, the method comprising applying to the skin the composition of claim 16.